CLAIMS

1.   Process for compression of a block (310) of a size
L x H of a sequence of images, characterized in that it
comprises, in a repetitive manner, for said block:

    - a search step (240), in one of the images of the
sequence of images, for the zone of L x H pixels that is
the most similar to said block;

    - a step of determination (245) whether the
resemblance between said zone and said block responds to
predetermined criteria;

    - if said resemblance responds to said criteria, a
step of storage (255) of the motion vector which indicates
the distance between the block and the most similar zone
found;

    - if said resemblance does not respond to said
criteria, and if the block does not have a predetermined
minimum size, a step of cutting out (280, 281) said block
into sub-blocks (320, 330, 340, 350) and a supplemental
repetition for each of said sub-blocks, and

    - if said resemblance does not respond to said
criteria, and if said block has a predetermined minimum
size, a step of storage (266) of the block in the course of
which the block is compressed without reference to a
reference image.

2.   Process according to claim 1, characterized in
that:

    - in the course of the search step (240), there are
determined conjointly a transformation and a zone which
supply the transformed zone which is the most similar to
said block,

- in the course of the determination step (245), it is determined whether the resemblance between said transformed zone and said block responds to predetermined criteria, and

-in the course of the step of storage of the vector (255), if said zone after said transformation is the most closely resembling one, data representative of said transformation are stored.

3. Process according to any one of claims 1 or 2, characterized in that, in the course of the search step (240), one searches in a plurality of images of the sequence of images, for the zone of L x H pixels the most similar to said block, and in the course of the storage step of the vector (255), one stores data representative of the image which comprise said zone.

4. Process according to any one of claims 1 to 3, characterized in that, in the course of the search step (240), one searches only in the preceding image of the sequence of images, for the zone of L x H pixels the most similar to said block.

5. Process according to any one of claims 1 to 4, characterized in that, in the course of the cutting out step (280, 281), one cuts out said block (310) into two sub-blocks (320, 330) of the same dimensions.

6. Process according to any one of claims 1 to 5, characterized in that, in the course of each step of cutting out (280, 281), one cuts out the block (310) or the sub-block (320), on the one hand, vertically and, on the other hand, horizontally and, in the course of a selection

step (282), one selects the cutting out which optimizes the overall resemblance of the sub-blocks generated by each of said acts of cutting out, with zones of said images of the image sequence.

5

7.   Process according to any one of claims 1 to 6, characterized in that the predetermined criteria depend on the dimensions of the block in question.

10   8.   Device for compression of a block of a size L x H of a sequence of images, characterized in that it comprises a treatment means (410) adapted to control, in a repetitive manner, for each block:
    - a search means which searches, in one of the images
15   of the sequence of images, for the zone of L x H pixels that is the most similar to said block;
    - a determining means which determines whether the resemblance between said zone and said block responds to predetermined criteria;
20   - if said resemblance responds to said criteria, a storage means which stores the motion vector which indicates the distance between the block and the most similar zone found;
    - if said resemblance does not respond to said
25   criteria, and if the block has not a predetermined minimum size, a cutting out means which cuts out said block into sub-blocks, a supplemental repetition being carried out for each of said sub-blocks, and
    - if said resemblance does not respond to said
30   criteria, and said block has a predetermined minimum size, a storage means which compresses the block without

22

reference to a reference image and stores the compressed block.

9.   Process for decompression of an image block, characterized in that it comprises, in a repetitive manner:

- a step of reading (505) information representative of the block;

- a step of determining (505) whether said block is encoded in the form of several sub-blocks;

- if said block is not encoded in the form of several sub-blocks, a step of determining (505) whether said block has a predetermined minimum size;

- if said block is not encoded in the form of several sub-blocks and does not have a predetermined minimum size, a step of decompression of said block (510, 511, 512, 513) by reading a motion vector and simple copying of the block of the same dimensions corresponding to said motion vector, in a reference image,

- if said block is not encoded in the form of several sub-blocks and has a predetermined minimum size, a step of decompression of said block (520, 521, 522) by a decompression method that does not make reference to a reference image, and

- if said block is encoded in the form of several sub-blocks, a return (530, 531, 532) to the steps of determination for each of said sub-blocks.

10.   Device for decompression of an image block, characterized in that it comprises a treatment means (410) adapted to control, in a repetitive manner:

- a reading means which reads information representative of the block;

23

- a determining means which determines whether said block is encoded in the form of several sub-blocks;

- if said block is not encoded in the form of several sub-blocks, a determining means which determines whether

5   the block has a predetermined minimum size;

- if said block is not encoded in the form of several sub-blocks and does not have a predetermined minimum size, a decompression means which decompresses said block by reading a motion vector and simply copies the block of the

10   same dimensions corresponding to said motion vector, in a reference image,

- if said block is not encoded in the form of several sub-blocks and has a predetermined minimum size, a decompression means which decompresses said block according

15   to a decompression method that does not make reference to a reference image, and

- if said block is encoded in the form of several sub-blocks, a new repetition for each of said sub-blocks.